

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A computer-implemented method comprising:
using a data processor to parameterize a routing policy, wherein the parameterizing
includes identifying one or more common blocks of policy statements within the
routing policy, the common blocks of policy statements sharing a similar structure,
assigning sets of parameters to elements of the one or more common blocks, at least
one common block being re-used with a different assigned set of parameters, and
enabling a hierarchical arrangement of the one or more common blocks of policy
statements within the routing policy; and
applying the parameterized routing policy to a route.

2. (Previously Presented) The method of claim 1 wherein the routing policy includes a
plurality of policy statements, and wherein parameterizing includes assigning parameters to at
least some of the policy statements and refraining from assigning parameters to at least some
other of the policy statements to generate the parameterized routing policy.

3. (Previously Presented) The method of claim 1 wherein parameterizing includes:
for the routing policy, generating at least one parameterized-policy statement having an
associated set of parameters for one of either a customer or customer class.

4. (Previously Presented) The method of claim 1 wherein the routing policy includes a
plurality of policy statements, each policy statement having one or more differing values
associated with one or more customers or customer classes, and
wherein parameterizing includes assigning parameters to the one or more differing values
of the policy statements.

5. (Previously Presented) The method of claim 1 wherein parameterizing includes:

storing the parameter sets in a parameter table, the table associating each set of parameters with either a customer or a customer class.

6. (Previously Presented) The method of claim 5 wherein parameterizing includes reusing the common blocks in the parameterized routing policy.

7. (Previously Presented) The method of claim 6 wherein parameterizing includes reusing the common blocks in another parameterized routing policy.

8. (Previously Presented) The method of claim 6 wherein reusing the common blocks includes calling a parameterized policy with parameters from the parameter table based on one of either the customer or the customer class.

9. (Previously Presented) The method of claim 5 wherein applying includes determining at least one of whether to accept the route, whether to modify attributes of the route, or whether to send the route or the modified route to peer routing systems.

10. (Previously Presented) The method of claim 9 wherein when the route is accepted or modified, applying includes installing the accepted or the modified route.

11. (Previously Presented) The method of claim 9 including modifying attributes of the route, wherein modifying includes at least one of changing an attribute, creating a new attribute, or deleting an attribute of the route.

12. (Previously Presented) The method of claim 1 including:
identifying one or more common blocks of policy statements, the common blocks being common to more than one routing policy;
generating a commonized routing policy from the one or more common blocks; and
reusing the commonized routing policy by calling the commonized routing policy from within the more than one routing policy which uses the common blocks.

13. (Previously Presented) The method of claim 12 wherein parameterizing includes assigning parameters to at least some of the policy statements of the common blocks to parameterize at least some policy statements in the common blocks.

14. (Currently Amended) A routing apparatus comprising:

a processor to parameterize a routing policy, wherein the parameterizing includes identifying one or more common blocks of policy statements within the routing policy, the common blocks of policy statements sharing a similar structure, assigning sets of parameters to elements of the one or more common blocks, at least one common block being re-used with a different assigned set of parameters, and enabling a hierarchical arrangement of the one or more common blocks of policy statements within the routing policy, the processor to apply the parameterized routing policy to a received route; and

a storage element to store parameters associated with the parameterized routing policy.

15. (Previously Presented) The apparatus of claim 14 wherein the routing policy includes a plurality of policy statements, and wherein the processor is to assign parameters to at least some of the policy statements and is to refrain from assigning parameters to at least some other of the policy statements to generate the parameterized routing policy,

and wherein the processor is to store the assigned parameters in the storage element.

16. (Previously Presented) The apparatus of claim 14 wherein the processor is to generate at least one parameterized-policy statement having an associated set of parameters for one of either a customer or a customer class.

17. (Previously Presented) The apparatus of claim 14 wherein the routing policy includes a plurality of policy statements, each policy statement having one or more differing values associated with one or more customers or customer classes, and

wherein the processor is to assign parameters to the one or more differing values of the policy statements.

18. (Previously Presented) The apparatus of claim 14 wherein the processor is to store the parameter sets in a parameter table of the storage element, the table associating each set of parameters with either a customer or a customer class.

19. (Previously Presented) The apparatus of claim 18 wherein the processor is to reuse the common blocks in the parameterized routing policy.

20. (Previously Presented) The apparatus of claim 19 wherein the processor is to reuse the common blocks in another parameterized routing policy.

21. (Original) The apparatus of claim 19 wherein the processor, as part of reusing, is to call a parameterized policy with parameters from the parameter table based on one of either the customer or the customer class.

22. (Original) The apparatus of claim 18 wherein the processor is to determine at least one of whether to accept the route, whether to modify attributes of the route, or whether to send the route or the modified route to peer routing systems.

23. (Original) The apparatus of claim 22 wherein when the route is accepted or modified, the processor is to install the accepted or the modified route on a router.

24. (Original) The apparatus of claim 22 wherein the processor is to modify attributes of the route by at least one of changing an attribute, creating a new attribute, or deleting an attribute of the route.

25. (Previously Presented) The apparatus of claim 14 wherein the processor is to:

identify one or more common blocks of policy statements, the common blocks being common to more than one routing policy;

generate a commonized routing policy from the one or more common blocks; and
reuse the commonized routing policy by calling the commonized routing policy from within the more than one routing policy which uses the common blocks.

26. (Original) The apparatus of claim 25 wherein the processor is to assign parameters to at least some of the policy statements of the common blocks to parameterize the at least some policy statements in the common blocks.

27. (Currently Amended) A system comprising:
a data processor;
an information storage mechanism in communication with the data processor;
means for using the data processor to parameterize a routing policy, wherein the parameterizing includes identifying one or more common blocks of policy statements within the routing policy, the common blocks of policy statements sharing a similar structure, assigning sets of parameters to elements of the one or more common blocks, at least one common block being re-used with a different assigned set of parameters, and enabling a hierarchical arrangement of the one or more common blocks of policy statements within the routing policy;
means for applying the parameterized routing policy to a received route; and
means for storing parameters associated with the parameterized routing policy in the information storage mechanism.

28. (Previously Presented) The system of claim 27 wherein the routing policy includes a plurality of policy statements, and wherein the means for parameterizing is to assign parameters to at least some of the policy statements and is to refrain from assigning parameters to at least some other of the policy statements to generate the parameterized routing policy,

and wherein the means for parameterizing is to store the assigned parameters in the means for storing.

29. (Previously Presented) The system of claim 27 wherein the means for parameterizing is to generate at least one parameterized-policy statement having an associated set of parameters for one of either a customer or a customer class.

30. (Previously Presented) The system of claim 27 wherein the routing policy includes a plurality of policy statements, each policy statement having one or more differing values associated with one or more customers or customer classes, and

wherein the means for parameterizing is to assign parameters to the one or more differing values of the policy statements.

31. (Previously Presented) The system of claim 27 wherein the means for parameterizing is to:

store the parameter sets in a parameter table of the storage element, the table associating each set of parameters with either a customer or a customer class.

32. (Previously Presented) The system of claim 31 wherein the means for applying is to reuse the common blocks in the parameterized routing policy.

33. (Previously Presented) The system of claim 32 wherein the means for applying is to reuse the common blocks in another parameterized routing policy.

34. (Original) The system of claim 32 wherein the means for applying, as part of reusing, is to call a parameterized policy with parameters from the parameter table based on one of either the customer or the customer class.

35. (Original) The system of claim 31 wherein the means for applying is to determine at least one of whether to accept the route, whether to modify attributes of the route, or whether to send the route or the modified route to peer routing systems.

36. (Original) The system of claim 35 wherein when the route is accepted or modified, the means for applying is to install the accepted or the modified route on a router.

37. (Original) The system of claim 35 wherein the means for applying is to modify attributes of the route by at least one of changing an attribute, creating a new attribute, or deleting an attribute of the route.

38. (Original) The system of claim 27 wherein the means for parameterizing is to:
identify one or more common blocks of policy statements, the common blocks being common to more than one routing policy; and
generate a commonized routing policy from the one or more common blocks, and
wherein the means for applying is to reuse the commonized routing policy by calling the commonized routing policy from within the more than one routing policy which uses the common blocks.

39. (Original) The system of claim 38 wherein the means for parameterizing is to assign parameters to at least some of the policy statements of the common blocks to parameterize the at least some policy statements in the common blocks.

40. (Currently Amended) A machine-readable storage medium that provides instructions, which when executed by one or more processors, cause said processors to perform operations comprising:

parameterizing a routing policy, wherein the parameterizing includes identifying one or more common blocks of policy statements within the routing policy, the common blocks of policy statements sharing a similar structure, assigning sets of parameters to elements of the one or more common blocks, at least one common block being reused with a different assigned set of parameters, and enabling a hierarchical arrangement of the one or more common blocks of policy statements within the routing policy; and

applying the parameterized routing policy to a route.

41. (Previously Presented) The machine-readable storage medium of claim 40 wherein the instructions, when executed by one or more of said processors cause said processors to perform operations, wherein the routing policy includes a plurality of policy statements, and wherein parameterizing includes assigning parameters to at least some of the policy statements and refraining from assigning parameters to at least some other of the policy statements to generate the parameterized routing policy.

42. (Previously Presented) The machine-readable storage medium of claim 40 wherein the instructions, when executed by one or more of said processors cause said processors to perform operations, wherein parameterizing includes: for the routing policy, generating at least one parameterized-policy statement having an associated set of parameters for one of either a customer or a customer class.

43. (Previously Presented) The machine-readable storage medium of claim 40 wherein the instructions, when executed by one or more of said processors cause said processors to perform operations wherein the routing policy includes a plurality of policy statements, each policy statement having one or more differing values associated with one or more customers or customer classes.

44. (Previously Presented) The machine-readable storage medium of claim 43 wherein the instructions, when executed by one or more of said processors cause said processors to perform operations wherein parameterizing includes assigning parameters to the one or more differing values of the policy statements.

45. (Previously Presented) The machine-readable storage medium of claim 40 wherein the instructions, when further executed by one or more of said processors cause said processors to perform operations including:

storing the parameter sets in a parameter table, the table associating each set of parameters with either a customer or a customer class.

46. (Previously Presented) The machine-readable storage medium of claim 45 wherein the instructions, when executed by one or more of said processors cause said processors to perform operations including reusing the common blocks in the parameterized routing policy.

47. (Previously Presented) The machine-readable storage medium of claim 45 wherein the instructions, when executed by one or more of said processors cause said processors to perform operations including reusing the common blocks in another parameterized routing policy.

48. (Previously Presented) The machine-readable storage medium of claim 46 wherein the instructions, when executed by one or more of said processors cause said processors to perform operations including reusing the common blocks comprises calling a parameterized policy with parameters from the parameter table based on one of either the customer or the customer class.

49. (Previously Presented) The machine-readable storage medium of claim 45 wherein the instructions, when executed by one or more of said processors cause said processors to perform operations including applying further comprises determining at least one of whether to accept the route, whether to modify attributes of the route, or whether to send the route or the modified route to peer routing systems.

50. (Previously Presented) The machine-readable storage medium of claim 40 wherein the instructions, when executed by one or more of said processors cause said processors to perform operations including:

identifying one or more common blocks of policy statements, the common blocks being common to more than one routing policy;

generating a commonized routing policy from the one or more common blocks; and

reusing the commonized routing policy by calling the commonized routing policy from within the more than one routing policy which uses the common blocks.

AMENDMENT AND RESPONSE UNDER 37 C.F.R. § 1.116 - EXPEDITED PROCEDURE

Serial Number: 10/765,756

Filing Date: January 27, 2004

Title: ROUTING SYSTEMS AND METHODS FOR IMPLEMENTING ROUTING POLICY WITH REDUCED CONFIGURATION AND
NEW CONFIGURATION CAPABILITIES

Page 11

Dkt: 1370.065US1

51-132. (Canceled)